1275

TELEFUNKEN

FERNSEH UND RUNDFUNK GMBH

BRUKSANVISNING
GEBRUIKSAANWIJZING
MODE D'EMPLOI
OPERATING INSTRUCTIONS
ISTRUZIONI D'USO
GEBRAUCHSANWEISUNG

TV PALcolor MR 21, MR 25, MR 28, S 25
TV PALcolor S 28, HiFi 28, MPR 15, SP 21, SP 28

1275

Optionals

Potete aumentare la gamma di applicazioni di questo televisore **TELEFUNKEN** PALcolor con accessori molto utili. L'apparecchio è predisposto per i collegamenti di tutti gli adapter e dispositivi di completamento appresso descritti. Possono essere installati piú componenti, dal servizio **TELEFUNKEN**: chiedete la combinazione per voi piú comoda.

1. Adapter audio
Per ricevere l'audio di norme estere come SECAM K/L, PAL I, NTSC.

2. Adapter NTSC
Per ricevere programmi televisivi a norma NTSC (USA) o NTSC (CCIR) (Insieme a pos. 1).

3. Componente ausiliare videotesti
Per ricevere i videotesti.

4. 2. Presa universale (ingresso)
Per il collegamento di un secondo videoregistratore, di un computer.

5. Prese Cinch o BNC
Per l'uscita video e audio, invece della presa universale.

DATI TECNICI GENERALI

Norma	CCIR
Sistema	PAL B/G, SECAM G
Tensione rete	220 V, 50 Hz
Impedanza ingresso antenna	75 Ohm
Fi-Audio	33,4 MHz
Mf-Audio	5,5 MHz
Fi-Luminanza	38,9 MHz
Fi-Crominanza	34,47 MHz
Sottoportante crominanza	4,43 MHz
Programmazione	Sintesi di frequenza
Smagnetizzazione automatica	Si
Programmi	40 (+ AV)

Dati tecnici speciali

TELEFUNKEN PALcolor	MPR 15	MR 21	SP 21	MR 25	S 25	MR 28	SP 28	S 28	HiFi 28
Cinescopio	15"/90°	21"/90°	21"/90°	25"/110°	25"/110°	28"/110°	28"/110°	28"/110°	28"/110°
Consumo (Wh)	65	65	68	78	82	78	82	82	86
Potencia uscita audio (W. musicali)	12	12	2x12	12	2x25	12	2x25	2x25	2x40
Prese: Peritelevisione	•	•	•	•	•	•	•	•	•
Cuffia	•	•	•	•	•	•	•	•	•
Reg. audio			•		•		•	•	•
Altopar. suppl.	1	1	2	1	2	1	2	2	2
Dimensioni L:	37	60	52	67	73	73	64	80	80
A:	36	43	47	49	49	53	56	53	53
P:	39	48	48	46	46	49	48	49	48

Repairs and Guarantee

Repairs should only be carried out by qualified technicians, and you should always consult your supplier in the event of necessary repairs. Improper handling may render the guarantee invalid.

It is important that the high voltage remain unchanged, and that the picture tube be exchanged correctly, when required. Otherwise, increased emission of x-radiation may result, thus rendering the set unsafe for operation.

Please ensure that your supplier completes the identification card properly when you purchase your TV set. Retain the documents together with your receipt or guarantee card in a safe place, as these may be required to substantiate any claim under the guarantee regulations.

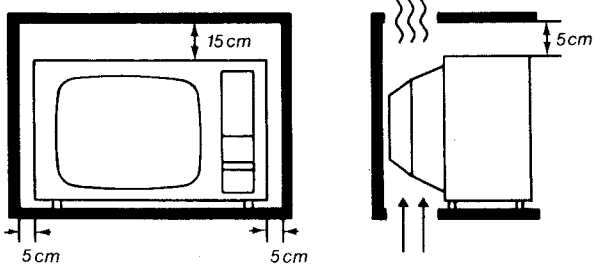
We recommend careful treatment and proper care for preserving the value of your television set. The cabinet should be cleaned only with a soft, dust-collecting cloth, or possibly with a very slightly moistened chamois leather. Under no circumstances should aggressive cleansers be employed.

Foreword

Please read the operating instructions prior to using your new PALcolor TV set. We have endeavoured to simplify the operation for you in these instructions.

The right place

Even modern TV sets develop a certain amount of heat, which must be dissipated effectively. It is therefore important to ensure that sufficient ventilation is provided. The illustration below shows the minimal distance from walls or shelves required.



without ventilation

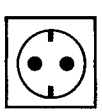
with rear ventilation

TV Reception Chart

Your PALcolor television set is equipped for receiving colour broadcasts in accordance with PAL and SECAM G standards. (Refer to page 28 for conversion to other standards.)

Channel	Frequency	Channel no.
E 2 – E 4, S 1	47 – 112 MHz	02 – 04, S 01
S 2 – S 10/M 2 – M 10	112 – 174 MHz	S 02 – 10
E 5 – E 12	174 – 230 MHz	05 – 12
S 11 – S 20/U 1 – U 10	230 – 300 MHz	S 11 – 20
E 21 – E 69	470 – 860 MHz	21 – 69

Connections

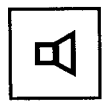


Mains

PALcolor TV sets can be used at a nominal AC supply voltage of 220 V. Connect a suitable mains plug to the power lead. Connect the mains plug to a convenient mains socket. If your home is connected to an overhead power system, we advise you to disconnect the TV set from the mains during a thunderstrom.

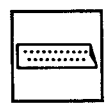
Aerial

The TV sets can be connected to any good conventional aerial system; all necessary connection leads can be obtained from your supplier along with information on cable TV systems. The telescopic aerial on portable receivers is for outdoor operation only; at home you should use a proper roof aerial.



External loudspeakers

External loudspeakers must be rated for a connected load of 8 Ω; for sets with an output power rating of 25 W or higher, the load rating must be 4 Ω. They are connected at the rear panel of the set. The plugs can be inserted into the jacks in two different positions. The built-in speakers are switched off for the first position, but not for the second position.



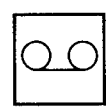
Scart socket

Your tv set has been fitted with an additional socket, a scart socket, to enable you to connect many different types of auxiliary equipment, such as video disc recorders, home computers, tele-games etc. . .

Headphones

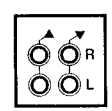
The headphone jack is situated on the front panel of the set. Matching headphones and extension cables are available from one's local dealer.

The following additional features may be present:



Tape recorders and hifi systems

With the use of a stereo audio cable, reel-type or cassette recorders for recording, or hifi systems for play-back of the television sound can be connected to this jack on the front panel of the set.



An audio cable can likewise be connected to the Cinch phono jacks on the rear panel, instead of the universal jacks, for sound recording and play-back. For this purpose, the switch located above the jacks must be positioned downward.

The display and control components

included in your TELEFUNKEN PALcolor television set are identified by means of internationally comprehensible symbols, which are explained in the following. The number and configuration of the display and control components may differ somewhat from one model to another.

The power switch is always a large, conspicuous push-button.

The remaining controls are as follows:

For the picture

- Brightness key
- Contrast key
- Colour saturation key

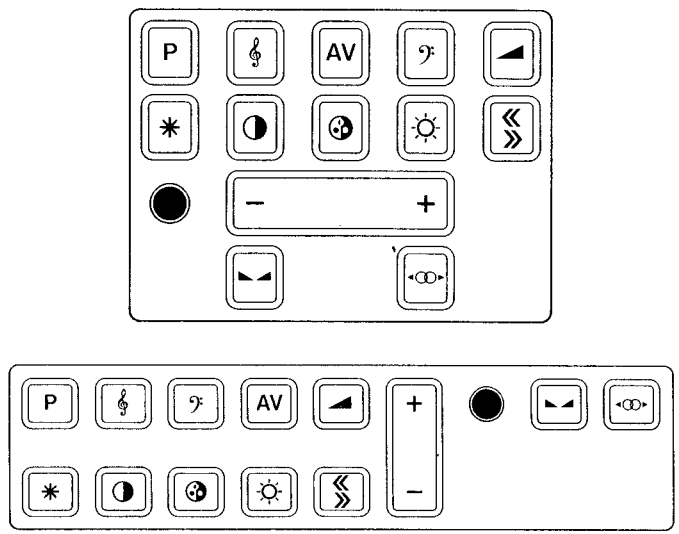
For the sound

- Volume key

Additional keys for stereo sets

- Treble key
- Bass key
- Balance key
- Base width key

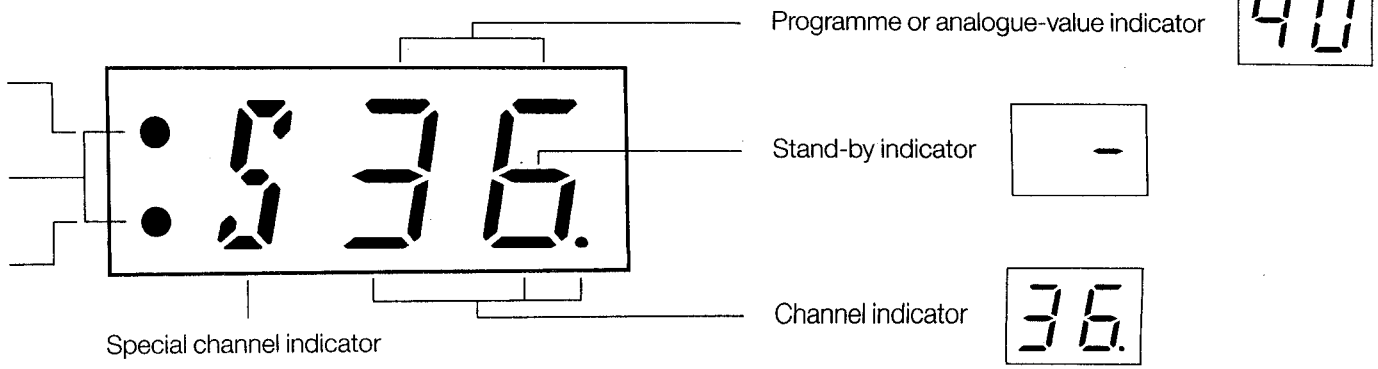
Control panels



For entry and station memory

- Entry key (–: decreasing; +: increasing)
- P Programme key
- ✳ Channel key
- « » Fine tuning key
- AV AV input key
- ● Input indicator (LED)

Display


Lights up when sound channel 1 is switched on during two-tone broadcasts
Both light up for stereo sound; do not light up during monaural broadcasts
Lights up when sound channel 2 is switched on during two-tone broadcasts
Special channel indicator
Programme or analogue-value indicator
40
Stand-by indicator
Channel indicator
36

The operation of your PALcolor television set is described in two sections:
1. Operation at the set; 2. Infrared remote-control unit

1. Operation at the set

Switching on and off

The set is electrically isolated from the power mains by the power switch. When the set is switched on by pressing of the power switch, the unit returns to the setting from which it was last switched off, that is, stand-by or programme 1. The set automatically switches to the stand-by mode 10 min after the end of transmission or 10 min after a connected AV unit has ceased to emit a signal. A horizontal dash then lights up on the programme display panel. For switching the set on once again, the »P« key must be pressed until the display lights up.

Note

The »+/–« key is employed for the following entries. It is activated by pressing of a function key (such as brightness, contrast, etc.) for about 6 s. This condition is indicated by the green LED located beside the key. The actuation must begin during this period. Brief pressing of the »+/–« key causes advancement by a single step, whereas prolonged pressing causes continuous, automatic advancement.

Programme selection

Forty programmes can be selected.

- The »P« key is pressed: The green input indicator beside the »+/–« key lights up.
- With the use of the »+/–« key, the desired programme setting is selected in increasing or decreasing order.
- The programme display indicates the selected programme setting.
- The green input indication vanishes about 6 s after the last actuation of the »+/–« key.

Channel selection

- The »✳« key is pressed: The green input indicator lights up, and the programme indicator changes to channel indicator (dot at lower right).
- With the use of the »+/–« key, the desired channel is selected in increasing or decreasing order.
- The channel indicator then displays the selected channel.
- *For fine tuning, the »* ⟪ *« key is pressed.*
- Optimal picture adjustment is achieved with the use of the »+/–« key.

Cable channels S1 to S20

- The »✳« key is pressed.
- The »+/–« key is pressed in the increasing or decreasing direction until S lights up in red on the display.
- One of the values, 01 to 20, is entered with the use of the »+/–« key.
- The green input indication vanishes about 6 s after the last actuation of the »+/–« key.

Channel memory at programme setting

- First of all, it is necessary to enquire about the channels on which the local television transmitting stations can be received.
- The channel is selected with the use of the »✳« and »+/–« keys (refer to channel selection).
- The programme setting is selected by means of the »P« and »+/–« keys (refer to programme selection).
- Storage is accomplished by renewed pressing of the »✳« key.
- For verifying the memory, the bars at the middle of the display flash briefly.
- The remaining channels can be successively committed to memory in the same manner.
- For **AV units** (such as video recorders), exclusively the programme settings 9, 19, 29, and 39 are selected, since these have been specially designed for the purpose.

Automatic search

If the channel on which a given programme is transmitted is not known, the automatic search function is employed. It can be started with the use of the remote control unit (refer to section 2).

Channel check

For finding out which channel is stored at the respective programme setting, the »✳« key is pressed. The stored channel appears on the display, and a dot appears at lower right. The programme setting is indicated once again after pressing of the »P« key.

AV key

Pressing of the »AV« key once causes a switch-over from the television programme to the **AV input** (scart socket) **(indication: A1).** If a **second AV input** is present repeated pressing of this key effects a switch to this input **(indication: A2)**. The A2 indication flashes, and a switch-back to A1 is effected if no second AV input is present.

For operation with a video recorder connected to the scart socket, the television set automatically switches to an AV mode, even from the stand-by mode (with the exception of the child-safe feature). A switch-back to the **television programme** can be effected at any time by pressing of the »P« key. Renewed pressing of the »AV« key then switches back to **AV operation.** If a computer equipped with an RGB output is connected to the scart socket, the television set can be switched over to RGB operation in the following manner:

1. The »AV« key is pressed once for A1 or twice for A2.
2. The »✱« key is pressed. A1 or A2 appears on the display, and a dot appears at lower right.
3. For terminating the RGB operation, the »✱« key is pressed again. The dot disappears, and switch-over to normal AV operation is effected.

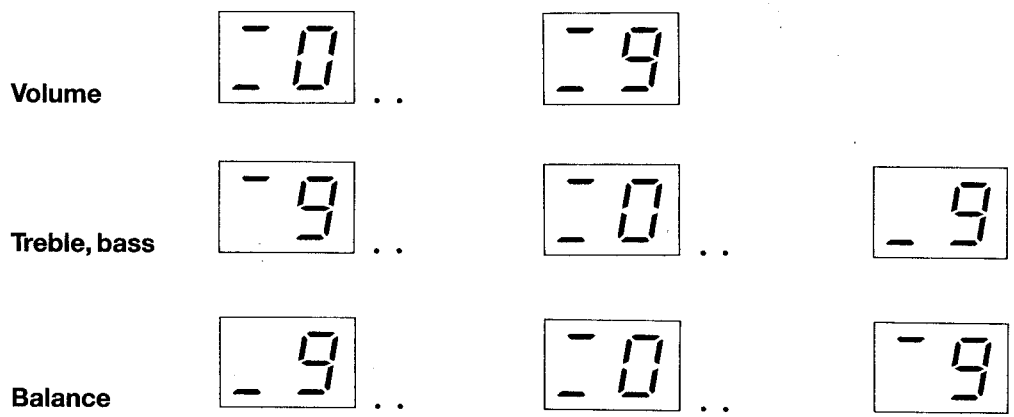
Picture adjustment

- By means of the colour saturation ◔, brightness ☼, and contrast ◑ keys, the picture can be adjusted to suit individual tastes. This setting is then the **basic** setting, which can be called with the use of the remote-control unit.
- The corresponding key is pressed: The green input indicator lights up.
- The desired intensity is adjusted with the use of the »+/–« key.
- The selected value is indicated as **=0** to **=9.**

- The green input indication disappears about 6 s after termination of the entry, and the value is now stored in the memory.
- For verification of storage, the bars at the middle of the display flash briefly.
- The analogue value display reverts to programme or channel.

Sound adjustment

- The sound can be adjusted to suit individual tastes by means of the **volume** ◢ and, if present, **treble** 𝄞, **bass** 𝄢, and **balance** ◣◢ keys. This setting is then the **basic** setting, which can be called by means of the remote control unit.
- The corresponding key is pressed: the green input indicator lights up.
- The intensity is adjusted as desired with the use of the »+/–« key.
- The selected value is indicated as **=0** to **=9** for volume, and **¯9** to **=0** to **_9** for **treble, bass,** and **balance** (¯ maximum or right / _ minimum or left).



- The green input indication disappears about 6 s after termination of the entry, and the value is now stored in memory.
- For verification of storage, the bars at the middle of the display flash briefly.
- The analogue value display reverts to programme or channel.

Base width

In addition, stereo sets are equipped with the »◖◯◗« key for electronic magnification of the base width. By pressing of this key, the base width is switched on for spatial sound and stereo broadcasts; it is switched off again by repeated pressing of this key.

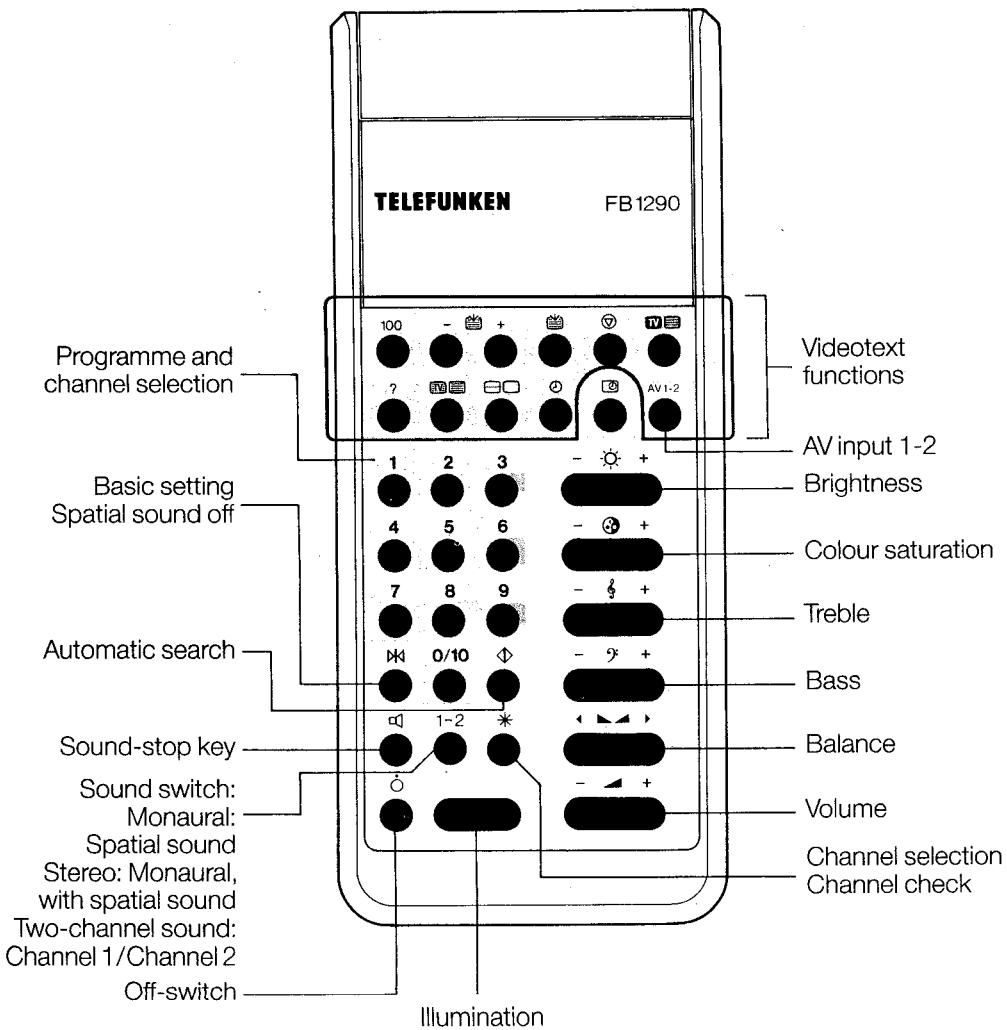
Finished

The basic adjustment of the picture and sound – for all programmes – has now been completed. All further operations can be effected with the use of the remote control unit. We wish you the utmost televiewing pleasure.

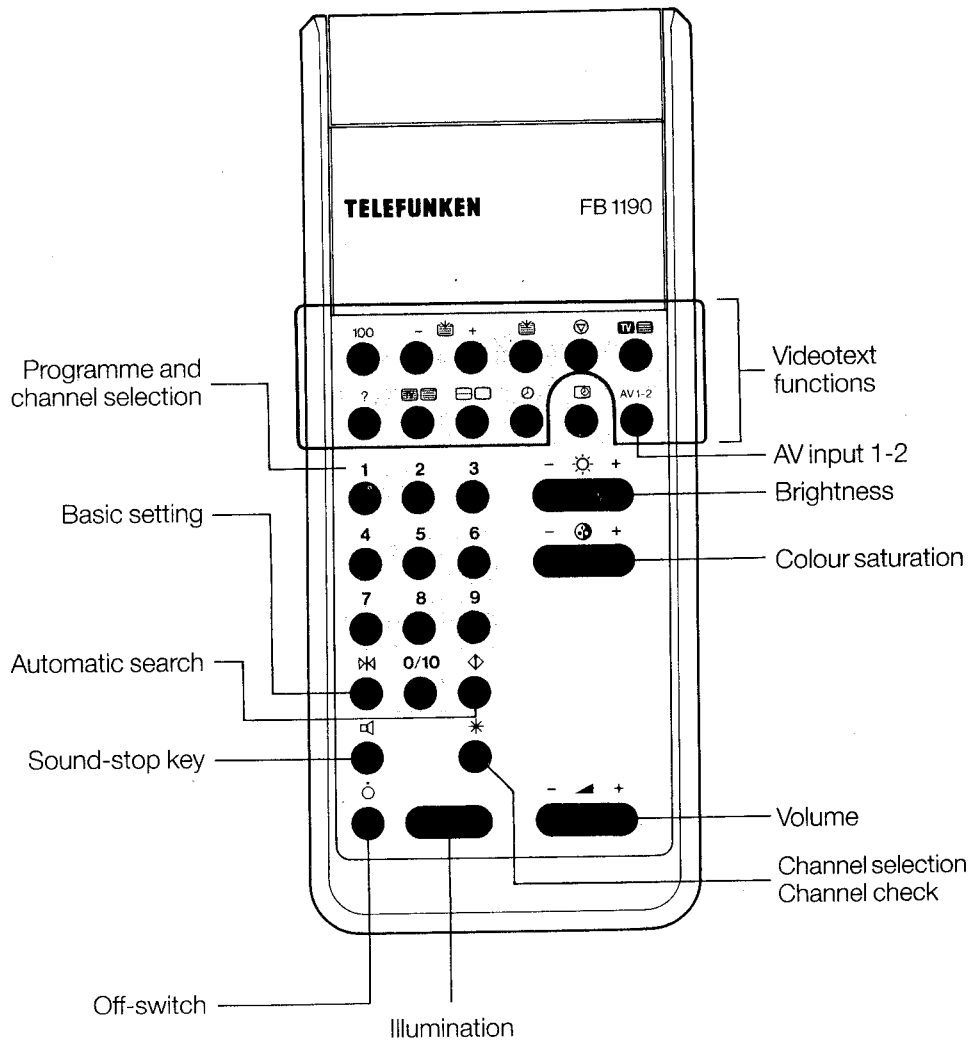
2. The infrared remote-control unit

There are two different remote-control units for PALcolor television sets with PLL station memory.

For stereo sets



For monaural sets



Both remote-control units are equipped with the push-button array for videotext. Videotext broadcasts can be received if the **TELEFUNKEN** PALcolor television set has been provided with a videotext decoder (refer to page 28).

The colour television set is switched on. The remote-control unit is then held in the hand and directed toward the television set.

Illumination of the unit (for stereo sets only)
For facilitating operation of the remote-control unit in the dark, pressing of the **yellow key** provides illumination of the control panel on the unit. The lighting persists for a period of about 4 s and then turns itself off. If it is no longer possible to switch the illumination on, the battery must be replaced. However, the remote-control functions remain operative for an additional brief period.

Stand-by
The »⏻« key is pressed. A horizontal bar lights up on the programme display; this is the stand-by indication. The television set is now switched off. Only the infrared remote-control sensor is still operative.

Switching on
The set is switched on by selection of a **programme, channel,** or **AV** with the use of the remote-control unit.

Programme selection
- Forty programmes can be selected in arbitrary order.
- Programmes 1 to 9 can be called directly by entering the digits 1 to 9.
- Programme 10 is called by pressing of the »0/10« key. Switching to programme 20, 30, or 40 is effected by repeated pressing of the »0/10« key. The units digit flashes for 10, 20, and 30, and the programme selection can be completed by entry of a units digit. If no units digit is entered, programme 10, 20, or 30 persists, and the flashing of the display ceases.

Automatic programme search
- After pressing of the automatic search key ⏀, the unit indicates the next programme setting occupied by a broadcasting station. Repeated pressing restarts the automatic search.

Channel selection
- The channel key ✳ is pressed: The horizontal bar on the digit to be entered flashes on the display.
- With the use of the keys 0 to 9, the channel number is now entered as a **two-digit** number (such as channel 6 = 06), which then appears on the display. The dot behind the display indicates that a channel number is now being displayed.
- For the entry of **cable channels** (S1 to S20), the channel key ✳ is pressed twice. **S** appears on the display.
- The entry of 01 to 20 is effected as just described.

Automatic channel search
If the channel assignment is not known, the occupied channels can also be sought automatically. For this purpose, the channel key ✳ is pressed, and the automatic search key ⏀ is pressed immediately thereafter. The display advances to the next channel occupied by a broadcasting station. This channel can then be stored in memory, or the automatic search can be restarted by renewed pressing of the automatic search key ⏀.

Storing of a channel at a programme setting
- A **channel** is selected (refer to channel selection).
- A **programme setting** is selected (refer to programme selection), and the units key is held depressed until storage is indicated by brief flashing of the bar at the middle of the display.

Channel check
Prolonged pressing of the channel key ✳ causes the channel number corresponding to the selected programme to be displayed. The display reverts to the programme 6 s after release of the key.

Correction
The picture and sound quality have been set during the basic adjustment at the set itself. If necessary, corrections can be effected by means of the rocker switches for **brightness** ☼, **colour** ◑, and **volume** ◢. The remote-control units for stereo sets have additional rocker switches for **treble** 𝄞, **bass** 𝄢, and **balance** ◣◢. The analogue value display thereby indicates the value digitally.

Return to the basic setting
The picture and sound can be returned to the basic setting by pressing of the norm key ▷¦◁.

Sound stop
For switching the sound off while continuing to watch the picture, the sound-stop key 🔇 (display L0), is pressed. Renewed pressing of the key switches the sound on again.

Special functions

After pressing of the sound off key, several special functions can be initiated by remote control:

Brightness +/–:	Brightness of the display
Colour +/–:	Colour adjustment (for NTSC conversion only)
***Balance** :	Colour shift toward red (◀) and blue (▶)
***Volume** +/–:	Volume for headphones and level for the tape recorder output
***1–2:**	Switch-over of headphones during two-channel sound reception from sound channel 1 to sound channel 2 and back; for stereo reception, switching to monaural and back to stereo

The values set for **display brightness, headphones volume,** and **tape recorder level** remain stored if the key is pressed for more than 4 s. Repeated pressing of the key cancels the special function.

Note: Upon pressing of a key, the full display brightness is initially present; it is dimmed to the value committed to memory 8 s after the last actuation.

* For stereo sets only

AV switch-over

The »AV« key switches from the programme mode to the AV mode. Its function is the same as for that on the set.

For stereo sets only:

- **Monaural reception**

  Television broadcasts accompanied by monaural sound, as well as play-back from monaural video recorders, can be reproduced with **spatial sound** by your set. In this manner, an acoustic impression similar to that for a stereo broadcast is created. For listening to a broadcast, **monaurally without spatial sound,** the ▷¦◁ key is pressed on the remote-control unit. Pressing of the »1–2« key causes reversion to **spatial sound.**

- **Stereo reception**

  During broadcasts in stereo, the set automatically switches to stereo sound reproduction, and both green LED's on the display panel light up. Pressing of the **spatial sound** key causes switch-over to monaural operation with **spatial sound.** If a stereo video recorder is connected by means of the AV connecting cable, switch-over between **monaural** and **stereophonic** operation is likewise effected with the use of the spatial sound key 1–2.

- **Two-channel sound reception**

  In this mode, the sound **1–2** key is employed for switching the reproduction through the loudspeaker from **sound channel 1** to **sound channel 2,** and vice-versa. The light-emitting diodes on the display panel indicate which sound channel is switched on (above: sound channel 1; below: sound channel 2).

Switching off – Stand-by

The »Ö« key is pressed. The horizontal bar lights up again. Occasionally, the set should be switched off by means of the power switch, since the picture screen is demagnetised when the set is switched on again. This is beneficial for the colour purity of the television picture.

Child-safe feature

For securing the television set against operation by others, the and Ö keys are pressed in succession, until the set switches to the **stand-by** mode. Subsequently, the set can be switched on again **only** with the use of the **remote-control unit.** Hence, this unit should then be kept out of the reach of unauthorised persons.

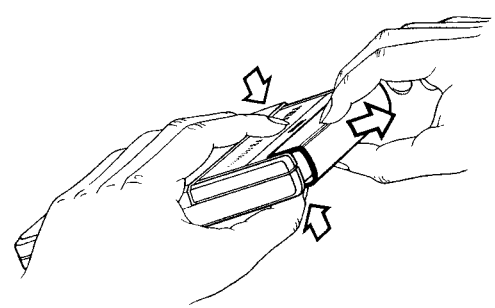
Furthermore, it is possible to programme the turn-off time with the use of the **timer** (for VT sets):

- The desired **programme** is selected.
- The » « key is pressed: Switch-over to the VT mode is thus effected.
- The key is pressed: The display is at the upper left-hand corner of the picture screen.
- The desired **turn-off time** is entered as a four-digit number by means of the **digit** keys.
- The » « key is pressed: Switch-over to the TV mode is thus effected.

The picture and time of day become visible, and the set switches off at the preprogrammed time.

Battery change

After removal of the front cover from the remote-control unit by lightly pressing the upper and lower parts of the cover together, the exhausted battery can be removed, and the electrical connection can be carefully disengaged. A fresh, high-performance flat-cell alkali-manganese battery, type IEC 6F22, 9 volt, is required for the purpose and can be obtained at one's local dealer. The new battery is carefully inserted. The proper position of the two snap connectors for the power supply must thereby be ensured.



Conversion accessories

With the use of appropriate accessories, your **TELEFUNKEN** PALcolor television set can be converted for substantially extended applications. Provision for connection of the adapters and conversion modules listed in the following is already present in the set. Several of these modules can be installed by your **TELEFUNKEN** supplier. Enquire about the combination best suited for your needs.

1. **Sound adapter**
   For the reception of sound broadcasts in conformance with foreign standards, such as SECAM K/L, PAL I, NTSC

2. **NTSC Adapter**
   For the reception of television programmes broadcast in conformance with the NTSC (USA) standard as well as NTSC (CCIR) standard (In conjunction with item 1.)

3. **Videotext conversion kit**
   For the reception of videotext broadcasts

4. **2nd scart socket** (input)
   For connection of a second video recorder or computer

5. **Cinch and BNC jacks**
   For sound and picture input and output, instead of the scart socket